AD-A088 347 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12823A LANCE, MISSILE NUMBER 4240, ROUND NUMBER 354 ECL, 10 JUL--ETC(U)
JUL 80

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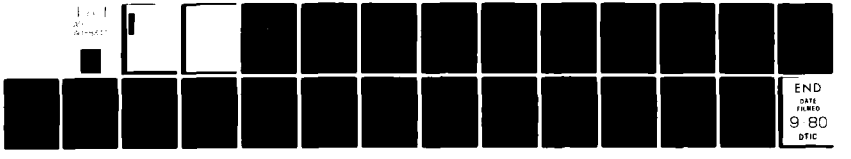

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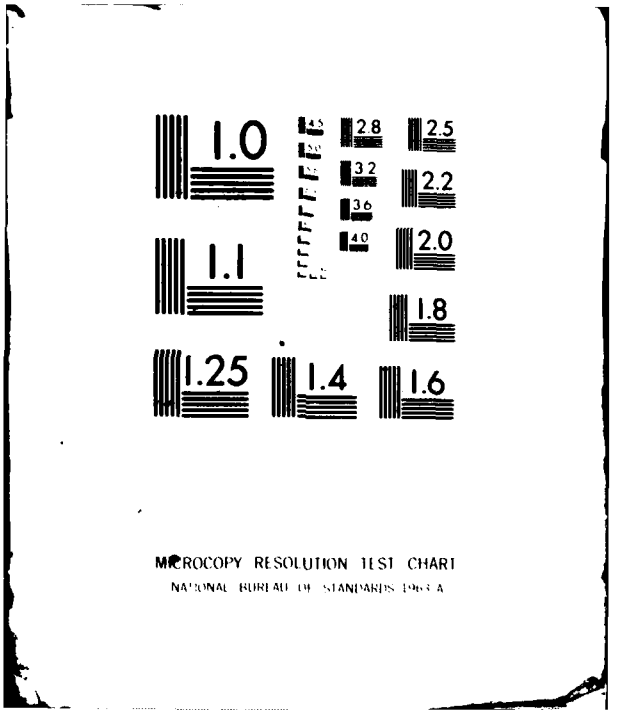
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 12823A LANCE, Missile Number 4240, Round Number 354 ECL, presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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CONTENTS

INTRODUCTION

12823A LANCE, Missile Number 4240, Round Number 354 ECL, was launched from Don Site, White Sands Missile Range (WSMR), New Mexico, at 0735 MDT on 10 July 1980. The scheduled launch time was 0730 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team. Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (^{o}C), relative humidity, dew point (^{o}C), density (gm/m^3), Wind direction and speed, and cloud cover were made at the Don Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE		
Don	0728 MDT	1260 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to as high as possible in 500-feet increments.

SITE AND TIME	
WSD	0720 MDT
HMN	0630 MDT

TABLE 1. Surface Observations Taken at 0730 MDT, 10 July 1980, at Don Site, 12823A LANCE, Missile Number 4240, Round Number 354 ECL.

ELEVATION	3997	FT/MSL
PRESSURE	882.7	MBS
TEMPERATURE	24.7	^{o}C
RELATIVE HUMIDITY	48	
DEW POINT	13.0	^{o}C
DENSITY	1025	GM/M^3
WIND SPEED	calm	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	1 2	CU CI

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM Don Site DATE 10 July 1980 TIME 0728 MDT

COORDINATES (WSTM) X= 511,988.37 Y= 247,396.36 H 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
sfc		CALM
60		CALM
120	270	05
180	240	05
240	235	04
300	180	07
360	130	09
420	140	11
480	131	13
540	130	12
600	135	12
660	130	14
720	130	14
780	135	12
840	135	12
900	135	12
960	140	11
1020	140	10
1080	140	08
1140	120	05
1200	115	04
1260	120	05

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 80 0720 HRS MDT
ASCENSION NO. 367

SIGNIFICANT LEVEL DATA
1920020367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 3.

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
882.6	3989.0	22.1	15.9	68.0
871.4	4355.8	24.5	13.7	51.0
850.0	5070.5	22.9	12.2	51.0
763.6	8121.2	18.9	8.8	52.0
700.0	10551.5	12.5	5.9	64.0
662.0	12083.3	8.8	3.2	68.0
653.0	12455.8	8.0	.7	60.0
635.4	13194.6	5.5	-1.2	62.0
609.6	14304.8	3.1	-7.9	44.0
601.0	14683.9	3.8	-13.4	27.0
567.6	16207.6	2.7	-15.8	24.0
534.8	17779.3	-1.2	-19.1	24.0
500.0	19537.2	-3.1	-21.8	22.0
442.8	22655.6	-10.7	-27.7	23.0
400.0	25195.3	-17.3	-32.5	25.0
373.4	26880.6	-21.0	-35.7	25.0
360.2	27754.8	-21.5	-36.2	25.0
328.6	29963.2	-26.0	-39.4	27.0
316.4	30862.1	-27.6	-40.4	28.0
300.0	32113.5	-31.2	-43.3	29.0
263.8	35068.4	-38.7	-49.9	29.0
250.0	36276.7	-41.4		
200.0	41138.1	-53.4		
174.0	44045.5	-60.4		
150.0	47056.0	-65.8		
139.8	48454.2	-69.4		
131.8	49610.3	-70.7		
124.0	50809.6	-68.6		
109.0	53325.7	-73.8		
100.0	54996.0	-71.4		
77.8	59084.5	-63.8		
70.0	62119.9	-64.5		

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 89 0720 HRS MDT
ASCENSION NO. 367

SIGNIFICANT LEVEL DATA
19200P0367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 3 (continued)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
65.0	63612.0	-65.5		
50.0	68073.6	-58.4		
30.0	79811.5	-49.7		
20.0	88679.6	-55.3		
12.6	99013.8	-39.9		

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 80 0720 HRS MDT
ASCENSION NO. 367

UPPER AIR DATA
1920020367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	882.6	22.1	15.9	69.0	1033.3	672.0	.0	.0	1.000309
4000.0	882.3	22.2	15.9	67.5	1032.7	672.1	108.1	.0	1.000309
4500.0	867.0	24.2	13.4	51.0	1009.0	674.0	108.1	1.2	1.000291
5000.0	852.1	23.1	12.4	51.0	995.7	672.6	108.1	2.4	1.000284
5500.0	837.3	22.3	11.8	51.1	980.9	671.8	108.1	3.6	1.000279
6000.0	822.7	21.7	11.2	51.3	966.1	671.0	107.6	4.1	1.000273
6500.0	808.4	21.0	10.6	51.5	951.5	670.2	106.2	3.5	1.000268
7000.0	794.3	20.4	10.1	51.6	937.1	669.4	118.2	3.9	1.000263
7500.0	780.5	19.7	9.5	51.8	923.0	668.6	130.1	4.9	1.000258
8000.0	766.9	19.1	9.0	52.0	909.1	667.8	127.4	6.5	1.000254
8500.0	753.5	17.9	8.4	53.9	896.7	666.5	123.2	7.7	1.000249
9000.0	740.0	16.6	7.9	56.3	884.9	664.9	111.2	8.2	1.000245
9500.0	726.8	15.3	7.3	58.8	873.2	663.4	100.9	8.7	1.000241
10000.0	714.0	14.0	6.6	61.3	861.8	661.8	92.1	9.4	1.000237
10500.0	701.3	12.6	6.0	63.7	850.6	660.3	86.2	10.5	1.000233
11000.0	688.7	11.4	5.1	65.2	839.0	658.8	82.2	11.8	1.000228
11500.0	676.2	10.2	4.3	66.5	827.5	657.3	79.3	14.2	1.000224
12000.0	664.0	9.0	3.4	67.8	816.2	655.8	77.3	16.5	1.000219
12500.0	651.9	7.9	.6	60.1	805.2	654.3	75.5	17.8	1.000210
13000.0	640.0	6.2	-.7	61.5	795.5	652.2	74.2	18.4	1.000205
13500.0	628.2	4.8	-2.9	57.0	784.9	650.5	73.2	17.9	1.000199
14000.0	616.6	3.8	-5.0	48.9	773.8	649.1	76.6	16.9	1.000192
14500.0	605.2	3.5	-10.4	35.2	760.8	648.5	85.2	15.8	1.000183
15000.0	593.9	3.6	-13.9	26.4	746.7	648.5	97.0	15.9	1.000177
15500.0	582.9	3.2	-14.7	25.4	733.8	648.0	108.9	17.2	1.000173
16000.0	572.0	2.8	-15.5	24.4	721.2	647.6	113.6	18.8	1.000170
16500.0	561.3	2.0	-16.4	24.0	710.0	646.6	115.7	20.3	1.000167
17000.0	550.8	.7	-17.5	24.0	699.9	645.1	117.6	20.5	1.000164
17500.0	540.5	-.5	-18.5	24.0	689.9	643.6	119.6	20.3	1.000161
18000.0	530.3	-1.4	-19.5	23.7	679.3	642.5	123.6	20.9	1.000158
18500.0	520.2	-2.0	-20.2	23.2	667.8	641.8	127.7	21.6	1.000155
19000.0	510.4	-2.5	-20.9	22.6	656.4	641.2	129.7	22.6	1.000152

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 80 0720 HRS MDT
ASCENSION NO. 367

UPPER AIR DATA
19200203G7
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
19500.0	500.7	-3.1	-21.7	22.0	645.3	640.5	131.2	23.6	1.000149
20000.0	491.1	-4.2	-22.6	22.1	635.6	639.1	131.4	23.7	1.000147
20500.0	481.6	-5.4	-23.6	22.3	626.3	637.6	131.3	23.7	1.000144
21000.0	472.3	-6.7	-24.5	22.5	617.0	636.2	132.2	23.2	1.000142
21500.0	463.2	-7.9	-25.5	22.6	607.9	634.7	133.7	22.6	1.000140
22000.0	454.3	-9.1	-26.5	22.8	599.0	633.2	135.6	21.5	1.000137
22500.0	445.5	-10.3	-27.4	23.0	590.2	631.8	137.9	20.1	1.000135
23000.0	436.7	-11.6	-28.4	23.3	581.4	630.2	139.3	18.4	1.000133
23500.0	428.1	-12.9	-29.3	23.7	572.7	628.6	139.3	16.4	1.000131
24000.0	419.6	-14.2	-30.3	24.1	564.2	627.1	138.4	14.8	1.000128
24500.0	411.3	-15.5	-31.2	24.5	555.9	625.5	135.2	14.1	1.000126
25000.0	403.1	-16.8	-32.2	24.8	547.6	623.9	131.7	13.4	1.000124
25500.0	395.1	-18.0	-33.1	25.0	539.1	622.4	125.1	15.0	1.000122
26000.0	387.1	-19.1	-34.1	25.0	530.5	621.1	119.9	16.9	1.000120
26500.0	379.2	-20.2	-35.0	25.0	522.1	619.7	114.3	18.1	1.000118
27000.0	371.6	-21.1	-35.8	25.0	513.3	618.6	108.8	19.1	1.000116
27500.0	364.0	-21.4	-36.1	25.0	503.5	618.3	104.4	19.3	1.000114
28000.0	356.5	-22.0	-36.5	25.2	494.4	617.5	100.4	18.8	1.000112
28500.0	349.2	-23.0	-37.2	25.7	486.2	616.2	95.8	18.9	1.000110
29000.0	342.0	-24.0	-38.0	26.1	478.2	615.0	91.1	19.6	1.000108
29500.0	335.0	-25.1	-38.7	26.6	470.3	613.7	85.9	20.7	1.000106
30000.0	328.1	-26.1	-39.4	27.0	462.5	612.4	80.9	22.0	1.000104
30500.0	321.3	-27.0	-40.0	27.6	454.5	611.3	76.4	22.8	1.000102
31000.0	314.6	-28.0	-40.7	28.1	446.9	610.0	72.4	23.5	1.000101
31500.0	307.9	-29.4	-41.9	28.5	440.1	608.2	69.7	23.6	1.000099
32000.0	301.5	-30.9	-43.0	28.9	433.4	606.4	68.5	23.6	1.000097
32500.0	295.0	-32.2	-44.1	29.0	426.4	604.8	69.7	23.3	1.000096
33000.0	288.6	-33.5	-45.3	29.0	419.4	603.2	70.5	23.4	1.000094
33500.0	282.4	-34.7	-46.4	29.0	412.6	601.6	71.2	23.7	1.000093
34000.0	276.4	-36.0	-47.5	29.0	405.9	600.0	73.3	24.0	1.000091
34500.0	270.4	-37.3	-48.7	29.0	399.3	598.4	75.8	24.2	1.000089
35000.0	264.6	-38.5	-49.8	29.0	392.8	596.8	78.9	24.1	1.000088

STATION ALTITUDE 5989.00 FEET MSL
19 JULY 80 0720 HRS MDT
ASCENSION NO. 357

UPPER AIR DATA
19208 0367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35500.0	258.8	-39.7	-54.5	18.6**	386.1	595.3	82.0	24.1	1.000086
36000.0	253.1	-40.8	-63.4	6.6**	379.4	593.9	82.6	24.3	1.000085
36500.0	247.5	-42.0			372.9	592.4	82.9	24.5	1.000083
37000.0	241.8	-43.2			366.3	590.8	81.3	24.6	1.000082
37500.0	236.3	-44.4			360.0	589.2	79.5	24.8	1.000080
38000.0	231.0	-45.7			353.7	587.6	75.2	24.7	1.000079
38500.0	225.7	-46.9			347.6	586.0	70.6	24.8	1.000077
39000.0	220.6	-48.1			341.5	584.4	69.7	25.1	1.000076
39500.0	215.6	-49.4			335.6	582.8	69.7	25.5	1.000075
40000.0	210.7	-50.6			329.8	581.2	71.4	24.7	1.000073
40500.0	205.9	-51.8			324.2	579.6	73.8	23.4	1.000072
41000.0	201.3	-53.1			318.6	578.0	74.2	22.2	1.000071
41500.0	196.6	-54.3			312.8	576.4	72.4	21.2	1.000070
42000.0	191.9	-55.5			307.1	574.8	70.3	20.7	1.000068
42500.0	187.4	-56.7			301.5	573.2	68.0	21.1	1.000067
43000.0	182.9	-57.9			296.0	571.6	66.5	21.2	1.000066
43500.0	178.6	-59.1			290.7	570.0	66.0	20.8	1.000065
44000.0	174.4	-60.3			285.4	568.4	65.3	20.7	1.000064
44500.0	170.1	-61.2			279.7	567.1	64.5	21.1	1.000062
45000.0	166.0	-62.1			274.0	565.9	64.1	21.1	1.000061
45500.0	162.0	-63.0			268.5	564.7	64.0	21.0	1.000060
46000.0	158.0	-63.9			263.1	563.5	65.6	19.9	1.000059
46500.0	154.2	-64.8			257.8	562.3	70.4	17.8	1.000057
47000.0	150.4	-65.7			252.6	561.1	78.5	16.7	1.000056
47500.0	146.7	-66.9			247.8	559.4	90.1	17.7	1.000055
48000.0	143.0	-68.2			243.2	557.7	98.4	18.4	1.000054
48500.0	139.5	-69.5			238.5	556.0	102.0	17.4	1.000053
49000.0	136.0	-70.0			233.2	555.3	105.3	16.0	1.000052
49500.0	132.5	-70.6			227.9	554.5	104.3	11.8	1.000051
50000.0	129.2	-70.9			221.6	555.2	102.1	7.6	1.000049
50500.0	126.9	-69.1			215.1	556.4	92.1	5.1	1.000048
51000.0	122.8	-69.0			209.5	556.6	66.7	3.0	1.000047

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 5989.00 FEET MSL
10 JULY 60 0720 HRS MDT
ASCENSION NO. 367

UPPER AIR DATA
1920029367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
51500.0	119.7	-70.0			205.3	555.2	61.0	4.6	1.000046
52000.0	116.7	-71.1			201.1	553.8	59.0	6.3	1.000045
52500.0	113.7	-72.1			197.0	552.4	70.9	8.8	1.000044
53000.0	110.8	-73.1			193.0	551.0	77.7	11.6	1.000043
53500.0	108.0	-73.5			188.5	550.4	81.3	14.2	1.000042
54000.0	105.3	-72.8			183.1	551.4	83.7	16.8	1.000041
54500.0	102.6	-72.1			177.8	552.4	83.4	18.7	1.000040
55000.0	100.0	-71.4			172.6	553.4	81.8	20.2	1.000038
55500.0	97.5	-70.6			167.7	554.4	80.7	21.3	1.000037
56000.0	95.1	-69.9			162.9	555.4	80.9	19.7	1.000036
56500.0	92.7	-69.1			158.3	556.5	81.1	18.0	1.000035
57000.0	90.4	-68.3			153.8	557.5	83.3	17.2	1.000034
57500.0	88.2	-67.6			149.4	558.6	87.0	16.9	1.000033
58000.0	86.0	-66.8			145.2	559.6	90.0	16.9	1.000032
58500.0	83.8	-66.1			141.0	560.6	91.9	17.1	1.000031
59000.0	81.8	-65.3			137.0	561.7	93.7	16.9	1.000031
59500.0	79.7	-64.5			133.1	562.7	95.4	15.1	1.000030
60000.0	77.7	-63.8			129.4	563.7	97.8	13.3	1.000029
60500.0	75.8	-64.0			126.3	563.5	102.9	11.7	1.000028
61000.0	74.0	-64.1			123.3	563.2	109.5	10.3	1.000027
61500.0	72.2	-64.3			120.4	563.0	112.0	10.1	1.000027
62000.0	70.4	-64.5			117.5	562.8	113.5	10.1	1.000026
62500.0	68.7	-64.8			114.8	562.4	114.3	10.8	1.000026
63000.0	67.0	-65.1			112.2	561.9	114.2	12.5	1.000025
63500.0	65.4	-65.4			109.6	561.5	113.7	14.2	1.000024
64000.0	63.8	-65.0			106.7	562.1	107.3	15.2	1.000024
64500.0	62.2	-64.3			103.8	563.0	101.8	16.4	1.000023
65000.0	60.7	-63.7			101.0	563.9	94.0	17.4	1.000022
65500.0	59.3	-63.0			98.2	564.8	85.4	18.6	1.000022
66000.0	57.8	-62.3			95.6	565.6	79.5	19.9	1.000021
66500.0	56.4	-61.7			93.0	566.5	79.6	20.5	1.000021
67000.0	55.1	-61.0			90.4	567.4	79.7	21.1	1.000020

STATION ALTITUDE 3989.00 FEET MSL
10 JULY AT 0720 HRS MDT
ASCENSION NO. 367

UPPER AIR DATA
19200203J7
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
67500.0	53.7	-60.4			88.0	568.3	80.9	20.6	1.000020
68000.0	52.8	-59.7			85.6	569.2	82.4	20.0	1.000019
68500.0	51.2	-59.0			83.3	570.1	83.9	19.8	1.000019
69000.0	49.9	-58.4			81.0	570.9	85.2	20.3	1.000018
69500.0	48.8	-58.0			79.0	571.5	86.4	21.0	1.000018
70000.0	47.6	-57.6			77.0	572.0	86.9	23.7	1.000017
70500.0	46.5	-57.2			75.1	572.5	87.4	26.5	1.000017
71000.0	45.4	-56.8			73.2	573.1	88.5	28.3	1.000016
71500.0	44.4	-56.4			71.3	573.6	89.9	29.8	1.000016
72000.0	43.4	-56.0			69.5	574.1	91.2	30.9	1.000015
72500.0	42.3	-55.6			67.8	574.7	92.4	30.5	1.000015
73000.0	41.4	-55.2			66.1	575.2	93.7	30.1	1.000015
73500.0	40.4	-54.8			64.4	575.7	94.5	29.9	1.000014
74000.0	39.5	-54.4			62.8	576.2	93.9	30.4	1.000014
74500.0	38.5	-54.0			61.2	576.8	93.3	30.9	1.000014
75000.0	37.6	-53.6			59.7	577.3	92.3	31.3	1.000013
75500.0	36.8	-53.2			58.2	577.8	90.4	31.8	1.000013
76000.0	35.9	-52.8			56.8	578.4	88.5	32.3	1.000013
76500.0	35.1	-52.4			55.3	578.9	87.7	32.8	1.000012
77000.0	34.3	-52.0			53.9	579.4	88.3	33.3	1.000012
77500.0	33.5	-51.6			52.6	579.9	89.0	33.7	1.000012
78000.0	32.7	-51.2			51.3	580.5	89.9	34.1	1.000011
78500.0	31.9	-50.8			50.0	581.0	91.0	34.5	1.000011
79000.0	31.2	-50.4			48.7	581.5	92.2	35.0	1.000011
79500.0	30.4	-50.0			47.5	582.0	92.7	35.5	1.000011
80000.0	29.7	-49.6			46.4	582.5	92.7	36.0	1.000010
80500.0	29.1	-49.4			45.3	582.8	92.8	36.6	1.000010
81000.0	28.4	-49.1			44.2	583.1	93.1	37.0	1.000010
81500.0	27.8	-48.9			43.1	583.4	93.6	37.3	1.000010
82000.0	27.1	-48.6			42.1	583.8	94.2	37.6	1.000009
82500.0	26.5	-48.4			41.1	584.1	94.6	37.3	1.000009
83000.0	25.9	-48.1			40.1	584.4	94.8	35.8	1.000009

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 89 0720 HRS MDT
ASCENSION NO. 367

UPPER AIR DATA
192002367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 4 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.3	-47.9			39.2	564.7	95.0	34.3	1.000009
84000.0	24.8	-47.6			38.3	565.1	95.0	33.1	1.000009
84500.0	24.2	-47.4			37.4	565.4	93.7	33.5	1.000008
85000.0	23.7	-47.1			36.5	565.7	92.4	33.8	1.000008
85500.0	23.1	-46.9			35.6	566.0	91.2	34.2	1.000008
86000.0	22.6	-46.6			34.8	566.3	88.7	36.2	1.000008
86500.0	22.1	-46.4			33.9	566.7	86.5	38.2	1.000008
87000.0	21.6	-46.1			33.1	567.0	84.5	40.4	1.000007
87500.0	21.1	-45.9			32.4	567.3	82.8	41.4	1.000007
88000.0	20.6	-45.6			31.6	567.6	81.2	42.3	1.000007
88500.0	20.2	-45.4			30.8	567.9	79.6	43.2	1.000007
89000.0	19.7	-45.1			30.1	568.3	79.3	43.4	1.000007
89500.0	19.3	-44.9			29.4	568.6	79.6	43.1	1.000007
90000.0	18.9	-44.6			28.7	568.9	79.9	42.8	1.000006
90500.0	18.4	-44.3			28.1	569.3	80.6	42.3	1.000006
91000.0	18.0	-44.1			27.4	569.6	81.9	41.5	1.000006
91500.0	17.6	-43.8			26.8	570.0	83.3	40.7	1.000006
92000.0	17.2	-43.6			26.2	570.3	84.9	40.4	1.000006
92500.0	16.9	-43.3			25.6	570.6	86.9	43.4	1.000006
93000.0	16.5	-43.0			25.0	571.0	88.6	46.5	1.000006
93500.0	16.1	-42.8			24.4	571.3	90.2	49.6	1.000005
94000.0	15.8	-42.5			23.8	571.6	92.9	49.8	1.000005
94500.0	15.4	-42.3			23.3	572.0	95.8	49.8	1.000005
95000.0	15.1	-42.0			22.7	572.3	98.7	50.0	1.000005
95500.0	14.7	-41.7			22.2	572.6	100.7	48.1	1.000005
96000.0	14.4	-41.5			21.7	573.0	101.9	43.5	1.000005
96500.0	14.1	-41.2			21.2	573.3	103.4	39.0	1.000005
97000.0	13.8	-41.0			20.7	573.6	105.2	34.5	1.000005
97500.0	13.5	-40.7			20.2	574.0			1.000005
98000.0	13.2	-40.4			19.7	574.3			1.000004
98500.0	12.9	-40.2			19.3	574.6			1.000004
99000.0	12.6	-39.9			18.8	575.0			1.000004

STATION ALTITUDE 3989.00 FEET MSL
10 JULY 89 0720 HRS MDT
ASCENSION NO. 367

MANDATORY LEVELS
19200207367
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 5.

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5067.	22.9	12.2	51.	108.1	2.6
800.0	6706.	20.6	10.3	52.	111.6	3.6
750.0	8620.	17.6	8.3	54.	120.1	7.8
700.0	10541.	12.5	5.9	64.	85.8	10.6
650.0	12567.	7.6	.4	60.	75.3	17.9
600.0	14711.	3.8	-13.5	27.	89.6	15.6
550.0	17020.	.6	-17.6	24.	117.8	20.5
500.0	19509.	-3.1	-21.8	22.	131.3	23.6
450.0	22212.	-9.7	-26.9	23.	136.6	20.8
400.0	25152.	-17.3	-32.5	25.	129.2	13.9
350.0	28397.	-22.9	-37.2	26.	96.4	18.8
300.0	32048.	-31.2	-43.3	29.	68.7	23.5
250.0	36196.	-41.4			82.8	24.4
200.0	41037.	-53.4			73.8	22.0
175.0	43814.	-60.1			65.5	20.7
150.0	46927.	-65.8			79.2	16.8
125.0	50503.	-68.0			88.0	4.5
100.0	54024.	-71.4			81.9	20.1
80.0	59223.	-64.6			95.0	15.5
70.0	61905.	-64.5			113.8	10.1
60.0	64903.	-63.3			90.5	17.8
50.0	68712.	-58.4			85.1	20.2
40.0	73358.	-54.6			94.4	30.0
30.0	79468.	-49.7			92.7	35.8
25.0	83400.	-47.7			95.2	33.6
20.0	88260.	-45.3			79.2	43.5
15.0	94605.	-41.9			98.9	50.0

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80 0630 HRS MDT
ASCENSION NO. 233

SIGNIFICANT LEVEL DATA
1920010233
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 6.

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
878.5	4126.6	19.5	10.1	58.0
868.8	4443.2	24.8	11.4	43.0
850.0	5074.5	25.6	9.8	37.0
806.6	6579.4	21.9	8.8	43.0
757.2	8369.1	17.5	6.1	47.0
700.0	10558.6	12.9	4.1	55.0
662.2	12083.2	9.1	1.8	60.0
607.0	14427.0	2.0	-1.4	78.0
595.5	14934.5	1.7	-17.2	23.0
589.4	15207.7	2.5	-20.0	17.0
580.6	15607.6	3.1	-22.6	13.0
563.4	16406.2	1.8	-22.0	15.0
521.4	18441.7	-2.8	-25.8	15.0
500.0	19530.9	-4.1	-28.4	13.0
450.0	22229.2	-10.7	-32.9	14.0
447.7	22358.8	-11.0	-33.2	14.0
400.0	25172.3	-17.1	-38.1	14.0
369.8	27093.4	-21.5	-41.1	15.0
356.2	28000.3	-22.7	-41.5	16.0
300.0	32067.9	-32.3	-48.5	18.0
292.0	32694.2	-33.5	-49.5	18.0
250.0	36244.5	-38.8		
219.8	39088.0	-49.7		
200.0	41102.0	-54.5		
181.2	43162.2	-59.4		
167.0	44833.4	-62.7		
150.0	46986.6	-68.2		
132.2	49461.0	-72.5		
125.0	50554.7	-69.5		
108.2	53368.9	-73.2		
100.0	54893.8	-72.7		
92.8	56356.7	-68.5		

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 69 0630 HRS MDT
ASCENSION NO. 233

SIGNIFICANT LEVEL DATA
1920010233
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 6 (continued)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
81.4	56053.1	-68.0		
70.0	61376.2	-63.9		
50.0	68008.4	-56.5		
34.6	76705.6	-52.3		

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80 0630 HRS MDT
ASCENSION NO. 233

UPPER AIR DATA
1920010233
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 7.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4126.6	878.5	18.5	10.1	58.0	1043.8	667.1	.0	.0	1.000288
4500.0	867.1	24.9	11.3	42.5	1007.7	674.5	62.0	.9	1.000282
5000.0	852.2	25.5	10.0	37.7	988.6	675.1	62.0	2.2	1.000273
5500.0	837.5	24.6	9.6	38.7	974.7	674.0	62.0	3.5	1.000268
6000.0	823.0	23.3	9.2	40.7	961.9	672.6	62.0	4.7	1.000265
6500.0	808.8	22.1	8.8	42.7	949.3	671.2	90.5	5.7	1.000261
7000.0	794.7	20.9	9.2	43.9	936.8	669.7	110.0	7.5	1.000256
7500.0	780.8	19.6	7.4	45.1	924.4	668.3	133.6	8.3	1.000252
8000.0	767.1	18.4	6.6	46.2	912.2	666.8	152.6	9.9	1.000247
8500.0	753.7	17.2	6.0	47.5	899.9	665.4	174.7	11.0	1.000243
9000.0	740.3	16.2	5.6	49.3	887.2	664.2	184.2	10.8	1.000239
9500.0	727.1	15.1	5.1	51.1	874.6	663.0	174.1	6.3	1.000235
10000.0	714.2	14.1	4.6	53.0	862.3	661.7	116.9	4.4	1.000231
10500.0	701.5	13.0	4.1	54.8	850.1	660.5	75.7	9.1	1.000228
11000.0	688.8	11.8	3.4	56.4	838.5	659.0	70.4	12.8	1.000223
11500.0	676.4	10.6	2.7	58.1	827.1	657.5	73.1	14.2	1.000219
12000.0	664.2	9.3	1.9	59.7	815.9	656.1	74.4	15.4	1.000215
12500.0	652.0	7.8	1.3	63.2	805.2	654.3	73.2	15.6	1.000212
13000.0	640.0	6.3	.7	67.0	794.8	652.5	72.3	15.9	1.000208
13500.0	628.3	4.8	-.0	70.9	784.5	650.7	73.7	16.0	1.000205
14000.0	616.7	3.3	-.8	74.7	774.4	648.9	75.1	16.2	1.000201
14500.0	605.3	2.0	-2.9	70.1	764.2	647.2	84.6	15.5	1.000195
15000.0	594.0	1.9	-17.8	21.6	751.7	646.4	95.4	15.2	1.000175
15500.0	583.0	2.9	-21.8	14.1	735.1	647.5	106.1	15.0	1.000169
16000.0	572.1	2.5	-22.3	14.0	722.6	647.0	117.0	15.1	1.000166
16500.0	561.4	1.6	-22.2	15.0	711.4	646.0	119.3	15.5	1.000164
17000.0	550.8	.5	-23.1	15.0	700.9	644.6	119.7	15.8	1.000161
17500.0	540.4	-.7	-24.0	15.0	690.5	643.3	121.2	16.7	1.000158
18000.0	530.2	-1.8	-25.0	15.0	680.4	641.9	123.6	17.8	1.000156
18500.0	520.2	-2.9	-25.9	14.9	670.2	640.6	132.0	19.3	1.000153
19000.0	510.3	-3.5	-27.1	14.0	658.9	639.9	138.7	21.1	1.000150
19500.0	500.6	-4.1	-28.3	13.1	647.8	639.2	143.5	22.9	1.000147

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 68 0630 HRS MDT
ASCENSION NO. 255

UPPER AIR DATA
1920010255
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 7 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
20000.0	490.9	-5.2	-29.1	13.2	630.1	637.8	146.1	24.0	1.000145
20500.0	481.4	-6.5	-30.0	13.4	628.7	636.3	146.2	23.5	1.000143
21000.0	472.1	-7.7	-30.8	13.5	619.4	634.9	146.7	22.2	1.000140
21500.0	463.0	-8.9	-31.7	13.7	610.2	633.4	148.0	19.7	1.000138
22000.0	454.0	-10.1	-32.5	13.9	601.2	631.9	149.8	15.9	1.000136
22500.0	445.2	-11.3	-33.4	14.0	592.1	630.5	136.7	12.6	1.000134
23000.0	436.6	-12.4	-34.3	14.0	582.8	629.2	126.7	18.0	1.000132
23500.0	427.7	-13.5	-35.2	14.0	573.6	627.9	123.1	23.7	1.000129
24000.0	419.2	-14.6	-36.1	14.0	564.6	626.5	122.5	25.7	1.000127
24500.0	410.9	-15.6	-36.9	14.0	555.8	625.2	122.6	26.2	1.000125
25000.0	402.8	-16.7	-37.8	14.0	547.1	623.9	122.7	26.6	1.000123
25500.0	394.7	-17.9	-38.6	14.2	538.4	622.5	122.8	27.1	1.000121
26000.0	386.7	-19.0	-39.4	14.4	529.9	621.1	122.8	25.6	1.000119
26500.0	378.9	-20.1	-40.2	14.7	521.6	619.7	122.7	23.2	1.000117
27000.0	371.2	-21.3	-41.0	15.0	513.4	618.3	122.7	20.8	1.000115
27500.0	363.6	-22.0	-41.3	15.4	504.4	617.4	117.8	18.5	1.000113
28000.0	356.2	-22.7	-41.5	16.0	495.4	616.6	109.8	16.6	1.000111
28500.0	348.8	-23.9	-42.3	16.2	487.3	615.1	100.7	15.7	1.000109
29000.0	341.5	-25.1	-43.2	16.5	479.4	613.7	91.4	15.5	1.000108
29500.0	334.3	-26.2	-44.0	16.7	471.7	612.2	86.8	16.0	1.000106
30000.0	327.4	-27.4	-44.9	17.0	464.0	610.7	83.8	16.8	1.000104
30500.0	320.5	-28.6	-45.8	17.2	456.5	609.3	81.7	17.8	1.000102
31000.0	313.8	-29.8	-46.6	17.5	449.2	607.8	80.0	18.8	1.000101
31500.0	307.3	-31.0	-47.5	17.7	441.9	606.3	77.9	19.2	1.000099
32000.0	300.9	-32.1	-48.4	18.0	434.8	604.8	75.8	19.5	1.000097
32500.0	294.5	-33.1	-49.2	18.0	427.3	603.6	74.1	19.7	1.000096
33000.0	288.1	-34.0	-50.7	16.4**	419.6	602.5	72.6	19.9	1.000094
33500.0	281.9	-34.7	-52.7	13.9**	411.8	601.6	72.4	20.9	1.000092
34000.0	275.8	-35.4	-55.0	11.4**	404.2	600.6	72.6	22.1	1.000090
34500.0	269.8	-36.2	-57.6	8.8**	396.7	599.7	74.5	23.5	1.000089
35000.0	264.0	-36.9	-60.8	6.3**	389.3	598.8	77.1	24.9	1.000087
35500.0	258.3	-37.7	-65.2	3.8**	382.1	597.8	78.7	26.2	1.000085

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80 0630 HRS MDT
ASCENSION NO. 233

UPPER AIR DATA
1920010233
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 7 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35000.0	252.7	-38.4	-73.4	1.2**	375.0	596.9	79.5	27.2	1.000084
35500.0	247.1	-39.8			368.9	595.1	79.3	27.7	1.000082
37000.0	241.6	-41.7			363.6	592.7	77.5	27.4	1.000081
37500.0	236.2	-43.6			358.5	590.2	75.7	27.1	1.000080
38000.0	230.9	-45.5			353.4	587.8	73.9	26.4	1.000079
38500.0	225.7	-47.4			348.4	585.3	72.1	25.8	1.000078
39000.0	220.7	-49.4			343.5	582.8	70.6	25.3	1.000077
39500.0	215.6	-50.7			337.6	581.1	68.9	24.9	1.000075
40000.0	210.6	-51.9			331.6	579.5	68.5	25.2	1.000074
40500.0	205.7	-53.1			325.6	578.0	68.0	25.5	1.000073
41000.0	201.0	-54.3			319.8	576.4	67.1	25.3	1.000071
41500.0	196.2	-55.4			314.0	574.8	65.9	25.0	1.000070
42000.0	191.6	-56.6			308.2	573.2	63.6	24.1	1.000069
42500.0	187.0	-57.8			302.6	571.7	60.2	22.7	1.000067
43000.0	182.6	-59.0			297.1	570.1	57.4	21.6	1.000066
43500.0	178.2	-60.1			291.4	568.7	55.4	20.9	1.000065
44000.0	173.9	-61.1			285.7	567.4	56.0	20.0	1.000064
44500.0	169.7	-62.0			280.1	566.0	60.3	19.0	1.000062
45000.0	165.6	-63.1			274.7	564.6	65.0	18.3	1.000061
45500.0	161.5	-64.4			269.6	562.9	68.8	19.1	1.000060
46000.0	157.6	-65.7			264.6	561.1	72.2	20.0	1.000059
46500.0	153.7	-67.0			259.6	559.4	73.7	20.4	1.000058
47000.0	149.9	-68.2			254.8	557.7	75.1	20.9	1.000057
47500.0	146.1	-69.1			249.5	556.5	80.0	20.7	1.000056
48000.0	142.4	-70.0			244.2	555.3	88.3	20.2	1.000054
48500.0	138.8	-70.8			239.1	554.1	95.9	20.1	1.000053
49000.0	135.3	-71.7			234.1	552.9	98.2	19.2	1.000052
49500.0	131.9	-72.4			228.9	552.0	100.7	18.3	1.000051
50000.0	128.6	-71.0			221.6	553.9	97.9	14.6	1.000049
50500.0	125.4	-69.6			214.6	555.7	89.8	10.1	1.000048
51000.0	122.2	-70.1			209.6	555.2	77.5	6.7	1.000047
51500.0	119.1	-70.7			205.0	554.3	67.1	4.8	1.000046

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STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80 0630 HRS MDT
ASCENSION NO. 233

UPPER AIR DATA
1920010233
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 7 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
52000.0	116.1	-71.4			209.4	553.4	44.7	3.2	1.000045
52500.0	113.1	-72.1			196.0	552.5	61.7	4.5	1.000044
53000.0	110.3	-72.7			191.6	551.5	72.1	6.3	1.000043
53500.0	107.5	-73.2			187.2	550.9	76.8	8.4	1.000042
54000.0	104.7	-73.8			182.3	551.2	77.5	10.9	1.000041
54500.0	102.1	-72.8			177.5	551.4	78.0	13.4	1.000040
55000.0	99.5	-72.4			172.6	552.0	75.9	14.6	1.000038
55500.0	97.0	-71.0			167.0	554.0	72.9	15.3	1.000037
56000.0	94.5	-69.5			161.7	555.9	71.0	15.6	1.000036
56500.0	92.1	-68.5			156.8	557.4	71.2	14.9	1.000035
57000.0	89.8	-68.4			152.8	557.5	71.3	14.3	1.000034
57500.0	87.6	-68.3			148.9	557.6	76.8	14.5	1.000033
58000.0	85.4	-68.2			145.2	557.7	82.5	14.8	1.000032
58500.0	83.3	-68.1			141.5	557.9	85.4	15.3	1.000032
59000.0	81.2	-67.9			137.9	558.1	86.5	15.7	1.000031
59500.0	79.2	-67.3			134.0	559.0	88.5	16.1	1.000030
60000.0	77.3	-66.6			130.3	559.9	92.3	16.6	1.000029
60500.0	75.4	-65.9			126.7	560.8	95.8	17.3	1.000028
61000.0	73.5	-65.2			123.1	561.8	96.2	18.4	1.000027
61500.0	71.7	-64.5			119.7	562.7	96.5	19.5	1.000027
62000.0	69.9	-63.9			116.4	563.6	95.8	19.3	1.000026
62500.0	68.2	-63.3			113.3	564.3	93.8	17.8	1.000025
63000.0	66.6	-62.8			110.3	565.0	91.4	16.2	1.000025
63500.0	65.0	-62.3			107.4	565.7	91.3	15.1	1.000024
64000.0	63.5	-61.7			104.6	566.4	92.2	14.1	1.000023
64500.0	61.9	-61.2			101.8	567.2	93.3	13.1	1.000023
65000.0	60.4	-60.7			99.1	567.9	93.2	14.4	1.000022
65500.0	59.0	-60.1			96.5	568.6	93.1	15.9	1.000021
66000.0	57.5	-59.6			93.9	569.3	92.9	16.8	1.000021
66500.0	56.2	-59.1			91.5	570.0	92.0	15.7	1.000020
67000.0	54.9	-58.5			89.0	570.7	90.9	14.6	1.000020
67500.0	53.5	-58.0			86.7	571.4	89.9	14.1	1.000019

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80
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UPPER AIR DATA
1920010235
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 7 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGRELS(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
68000.0	52.3	-57.5			84.4	572.1	89.0	14.2	1.000019
68500.0	51.0	-56.9			82.2	572.8	88.1	14.2	1.000018
69000.0	49.8	-56.5			80.0	573.5	89.0	17.2	1.000018
69500.0	48.6	-56.2			78.1	573.8	89.7	20.5	1.000017
70000.0	47.5	-55.9			76.2	574.2	90.3	23.7	1.000017
70500.0	46.4	-55.6			74.3	574.6	92.2	25.6	1.000017
71000.0	45.3	-55.4			72.5	574.9	93.9	27.4	1.000016
71500.0	44.2	-55.1			70.7	575.3	95.3	29.2	1.000016
72000.0	43.2	-54.8			68.9	575.6	95.4	29.4	1.000015
72500.0	42.2	-54.6			67.3	576.0	95.4	29.5	1.000015
73000.0	41.2	-54.3			65.6	576.3	95.4	29.6	1.000015
73500.0	40.3	-54.0			64.0	576.7	95.0	29.5	1.000014
74000.0	39.3	-53.8			62.4	577.0	94.6	29.3	1.000014
74500.0	38.4	-53.5			60.9	577.4	94.2	29.2	1.000014
75000.0	37.5	-53.2			59.4	577.7			1.000013
75500.0	36.6	-52.9			57.9	578.1			1.000013
76000.0	35.8	-52.7			56.5	578.5			1.000013
76500.0	34.9	-52.4			55.1	578.8			1.000012

STATION ALTITUDE 4126.59 FEET MSL
10 JULY 80 0630 HRS MDT
ASCENSION NO. 233

MANDATORY LEVELS
19200102J3
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 8.

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL.HU.**	WIND DATA	
		AIR	DEWPOINT		DIRECTION	SPEED
MILLIBARS	FEET	DEGREES	CENTIGRADE	PERCENT	DEGREES(TN)	KNOTS
850.0	5071.	25.6	9.8	37.	62.0	2.4
800.0	6808.	21.3	8.4	44.	103.2	6.8
750.0	8630.	16.0	5.9	48.	179.7	11.5
700.0	10548.	12.0	4.1	55.	73.9	9.7
650.0	12576.	7.6	1.2	64.	73.0	15.7
600.0	14718.	1.8	-8.9	45.	89.5	15.3
550.0	17021.	.4	-23.2	15.	119.8	15.8
500.0	19504.	-4.1	-28.4	13.	143.7	23.0
450.0	22195.	-10.7	-32.9	14.	150.9	13.1
400.0	25131.	-17.1	-38.1	14.	122.7	26.8
350.0	28372.	-23.7	-42.2	16.	102.4	15.8
300.0	32004.	-32.3	-48.5	18.	75.5	19.6
250.0	36165.	-38.8			79.9	27.6
200.0	41002.	-54.5			66.9	25.3
175.0	43766.	-60.8			54.8	20.3
150.0	46860.	-68.2			75.0	20.8
125.0	50409.	-69.5			89.1	9.8
100.0	54725.	-72.7			76.8	14.5
80.0	59102.	-67.5			87.1	15.9
70.0	61764.	-63.9			96.0	19.5
60.0	64889.	-60.5			93.2	14.7
50.0	68650.	-56.5			88.7	16.4
40.0	73323.	-54.0			95.0	29.5

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